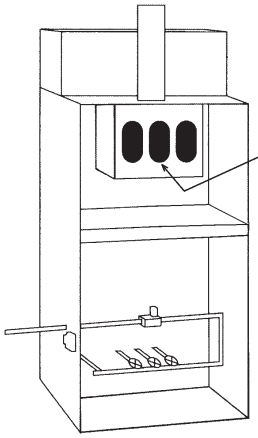
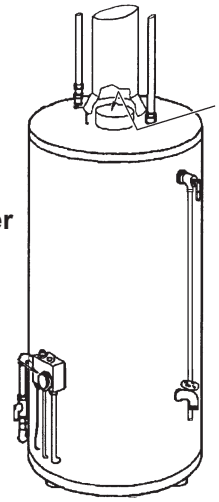
Sampling Locations

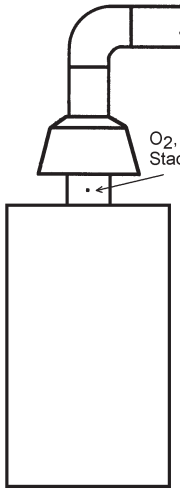
Insert the probe in the areas shown in the following illustrations to measure stack temperature, flue-gas O_2 content, and flue-gas CO content (Model 60 only).



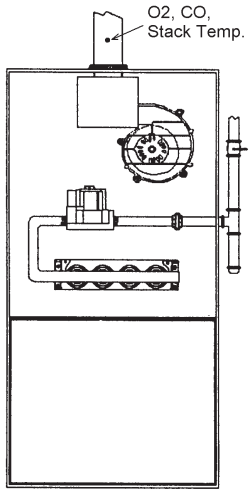
Atmospheric Burner or Gravity Vented Forced Air



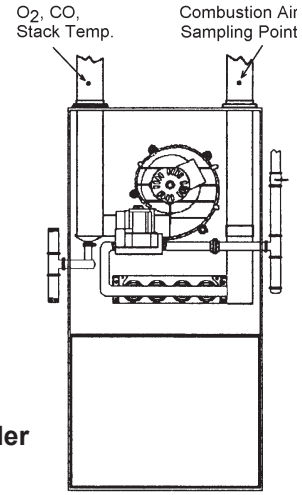
Hot Water Tank



Atmospheric or Gravity Vented Boiler



80% Eff. Fan Assist or Power Vented Furnace/Boiler

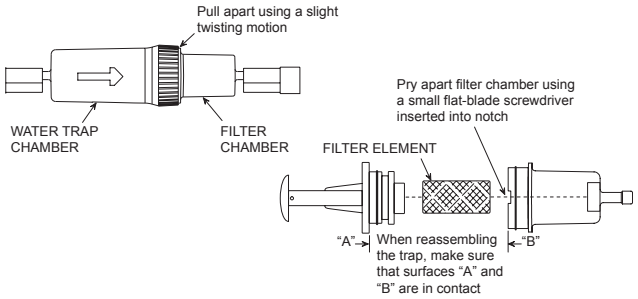


90% Eff. Condensing Furnace/Boiler

Water Trap / Filter Maintenance

Drain the water condensate collected in the water trap after every test.

Replace the filter element (P/N 07-1644) when dirty.



BACHARACH
The Measurable Difference

Fyrite® Tech 50 & 60
Quick Start Guide 24-9429

Rev. 1 – September 2003

This Guide provides basic information about how to turn ON the analyzer and conduct a combustion efficiency test. Detailed information concerning the analyzer's operation, set up, and calibration is contained in Instruction 24-9428.

Turning ON the Analyzer

1. Place the probe tip in the area that contains the burner's combustion-air source. This step allows the analyzer to measure the combustion-air temperature during the analyzer's warm-up period.

2. Press analyzer's **I/O** button.

3. Wait for the analyzer to complete its 60 second warm-up period.

Performing a Combustion Test

4. Press the ▲ or ▼ button to select the desired fuel and then press **ENTER**. The fuel codes are:

F1 = Natural Gas	F3 = LPG
F2 = Oil #2	F4 = Kerosene

Example: "F1" denotes Natural Gas

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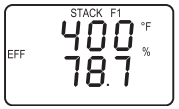
Website: www.bacharach-inc.com • E-mail: help@bacharach-inc.com

Printed in U.S.A.

5. Press the ▲ or ▼ button to display the "Stack Temperature & Efficiency" Screen.



6. Insert probe into the burner's flue-gas stream (see *Sampling Locations* on Pages 5 and 6).

7. Burner-service procedures can now begin. The readings diplayed on the analyzer will update continuously, showing the changes in burner performance.

8. Use the ▲ and ▼ buttons to scroll through the analyzer's other screen displays while a test is in progress. (The order in which the screens are displayed is shown on Pages 3 and 4.)

9. Press the **HOLD** button to stop the pump and freeze all readings. Press **ENTER** to resume testing.

Ending a Combustion Test

⚠ **WARNING!** ***Burn hazard.*** *Do not touch the probe after removing it from the flue-gas stream. Allow the probe to cool before handling (about 5 minues).*

10. End a test by first removing the probe from the flue-gas stream, and then allowing the pump to run until the O_2 reading reaches approximately 20.9%.

Turning OFF the Analyzer

11. Turn OFF the analyzer by pressing the **I/O** button. There is a 5-second delay before the analyzer actually turns OFF, during which time the unit can be turned back ON by pressing the **ENTER** button.

    A Fyrite Tech 60 will not turn OFF if a high level of CO is still being detected. The pump will remain running and the message "PurG CO" is displayed until the detected CO level drops below 50 ppm. This purge process can be bypassed by again pressing the **I/O** button.

Screen Displays – Fyrite Tech 50

Use the ▲ and ▼ buttons to scroll through the screens.

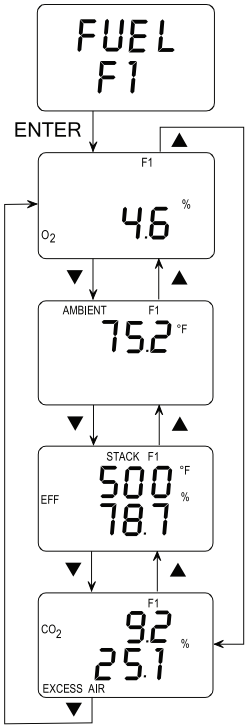
Fuel Select:
F1 = Natural Gas
F2 = Oil #2
F3 = LPG
F4 = Kerosene

O_2

Ambient Air Temperature

Stack Temperature & Efficiency

CO_2 & Excess Air



Screen Displays – Fyrite Tech 60

Use the ▲ and ▼ buttons to scroll through the screens.

Fuel Select:
F1 = Natural Gas
F2 = Oil #2
F3 = LPG
F4 = Kerosene

CO & O_2

CO Air Free

Ambient Air Temperature

Stack Temperature & Efficiency

CO_2 & Excess Air